Clinical Practice Guideline

Treating Tobacco Use and Dependence

Guideline Panel

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Guideline Development and Use

Treating Tobacco Use and Dependence, a Public Health Service-sponsored Clinical Practice Guideline, is the result of an extraordinary partnership among Federal Government and nonprofit organizations comprised of the Agency for Healthcare Research and Quality; Centers for Disease Control and Prevention; National Cancer Institute; National Heart, Lung, and Blood Institute; National Institute on Drug Abuse; Robert Wood Johnson Foundation; and University of Wisconsin Medical School's Center for Tobacco Research and Intervention. Each member of this consortium is dedicated to improving the Nation's public health, and their participation in this collaboration clearly demonstrates a strong commitment to tobacco cessation.

This guideline is an updated version of the 1996 *Smoking Cessation Clinical Practice Guideline No. 18*. It is the product of a private-sector panel of experts, consortium representatives, and staff. The update was written to include new, effective clinical treatments for tobacco dependence that have become available since the original guideline was developed. *Treating Tobacco Use and Dependence* will make an important contribution to the quality of care in the United States and the health of the American people.

The panel employed an explicit, science-based methodology and expert clinical judgment to develop recommendations on the treatment of tobacco use and dependence. Extensive literature searches were conducted, and critical reviews and syntheses were used to evaluate empirical evidence and significant outcomes. Peer and field reviews were undertaken to evaluate the validity, reliability, and utility of the guideline in clinical practice. The panel's recommendations are primarily based on published, evidence-based research. When the evidence was incomplete or inconsistent in a particular area, the recommendations reflect the professional judgment of panel members and consultants.

The recommendations herein may not be appropriate for use in all circumstances. Decisions to adopt any particular recommendation must be made by clinicians in light of available resources and circumstances presented by individual patients.

This Public Health Service-sponsored Clinical Practice Guideline gives hope to the 7 out of 10 smokers who try to quit each year. I urge every clinician, health plan, and health care institution to make treating tobacco dependence a top priority. Please ask your patients two key questions: "Do you smoke?" "Do you want to quit?" followed by use of the recommendations in this guideline.

David Satcher, MD, PhD
U.S. Surgeon General
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Abstract

Treating Tobacco Use and Dependence, a Public Health Service-sponsored Clinical Practice Guideline, is a product of the Tobacco Use and Dependence Guideline Panel ("the panel"), consortium representatives, consultants, and staff. These 30 individuals were charged with the responsibility of identifying effective, experimentally validated tobacco dependence treatments and practices. The updated guideline was sponsored by a consortium of seven Federal Government and nonprofit organizations: the Agency for Healthcare Research and Quality (AHRQ); Centers for Disease Control and Prevention (CDC); National Cancer Institute (NCI); National Heart, Lung, and Blood Institute (NHLBI); National Institute on Drug Abuse (NIDA); Robert Wood Johnson Foundation (RWJF); and University of Wisconsin Medical School's Center for Tobacco Research and Intervention (CTRI). This guideline is an updated version of the 1996 *Smoking Cessation Clinical Practice Guideline No. 18* that was sponsored by the Agency for Health Care Policy and Research (now the AHRQ), U.S. Department of Health and Human Services. The original guideline reflected the extant scientific research literature published between 1975 and 1994.

The updated guideline was written because new, effective clinical treatments for tobacco dependence have been identified since 1994. The accelerating pace of tobacco research that prompted the update is reflected in the fact that 3,000 articles on tobacco were identified as published between 1975 and 1994, contributing to the original guideline. Another 3,000 were published between 1995 and 1999 and contributed to the updated guideline. These 6,000 articles were screened and reviewed to identify a much smaller group of articles that served as the basis for guideline data analyses and panel opinion.

This guideline contains strategies and recommendations designed to assist clinicians; tobacco dependence treatment specialists; and health care administrators, insurers, and purchasers in delivering and supporting effective treatments for tobacco use and dependence. The recommendations were made as a result of a systematic review and analysis of the extant scientific literature, using meta-analysis as the primary analytic technique. The strength of evidence that served as the basis for each recommendation is clearly indicated in the guideline. A draft of the guideline was peer-reviewed prior to publication, and the comments of 70 external reviewers were incorporated into the final document. The key recommendations of the updated guideline, *Treating Tobacco Use and Dependence,* based on the literature review and expert panel opinion, are as follows:

1. Tobacco dependence is a chronic condition that often requires repeated intervention. However, effective treatments exist that can produce long-term or even permanent abstinence.

2. Because effective tobacco dependence treatments are available, every patient who uses tobacco should be offered at least one of these treatments:

- Patients *willing* to try to quit tobacco use should be provided with treatments identified as effective in this guideline.

- Patients *unwilling* to try to quit tobacco use should be provided with a brief intervention designed to increase their motivation to quit.

3. It is essential that clinicians and health care delivery systems (including administrators, insurers, and purchasers) institutionalize the consistent identification, documentation, and treatment of every tobacco user seen in a health care setting.

4. Brief tobacco dependence treatment is effective, and every patient who uses tobacco should be offered at least brief treatment.

5. There is a strong dose-response relation between the intensity of tobacco dependence counseling and its effectiveness. Treatments involving person-to-person contact (via individual, group, or proactive telephone counseling) are consistently effective, and their effectiveness increases with treatment intensity (e.g., minutes of contact).

6. Three types of counseling and behavioral therapies were found to be especially effective and should be used with all patients attempting tobacco cessation:

   - Provision of practical counseling (problemsolving/skills training);

   - Provision of social support as part of treatment (intra-treatment social support); and

   - Help in securing social support outside of treatment (extra-treatment social support).

7. Numerous effective pharmacotherapies for smoking cessation now exist. Except in the presence of contraindications, these should be used with all patients attempting to quit smoking.

   - Five *first-line* pharmacotherapies were identified that reliably increase long-term smoking abstinence rates:
     – Bupropion SR
     – Nicotine gum
     – Nicotine inhaler
     – Nicotine nasal spray
     – Nicotine patch

   - Two *second-line* pharmacotherapies were identified as efficacious and may be considered by clinicians if first-line pharmacotherapies are not effective:
     – Clonidine
     – Nortriptyline

- Over-the-counter nicotine patches are effective relative to placebo, and their use should be encouraged.

8. Tobacco dependence treatments are both clinically effective and cost-effective relative to other medical and disease prevention interventions. As such, insurers and purchasers should ensure that:

   - All insurance plans include as a reimbursed benefit the counseling and pharmacotherapeutic treatments identified as effective in this guideline; and

   - Clinicians are reimbursed for providing tobacco dependence treatment just as they are reimbursed for treating other chronic conditions.

The updated guideline is divided into eight chapters that provide an overview including methods (Chapter 1), information on the assessment of tobacco use (Chapter 2), brief clinical interventions, both for patients willing and unwilling to make a quit attempt at this time (Chapter 3), intensive clinical interventions (Chapter 4), systems interventions for health care administrators, insurers, and purchasers (Chapter 5), the scientific evidence supporting the guideline recommendations (Chapter 6), and special populations and topics (Chapters 7 and 8).

A comparison of the findings of the updated guideline with the original guideline reveals the considerable progress made in tobacco research over the brief period separating these two publications. Tobacco dependence is now increasingly recognized as a chronic disease, one that typically requires ongoing assessment and repeated intervention. In addition, the updated guideline offers the clinician many more efficacious treatment strategies than were identified in the original guideline. There are now seven different efficacious agents in the smoking cessation pharmacopoeia, allowing the clinician and patient many different medication options. In addition, recent evidence has identified new, efficacious counseling strategies. In particular, proactive telephone counseling is efficacious, as is counseling that helps smokers attain social support outside of the treatment context. The updated guideline also reveals greater evidence of the strong dose-response relation between counseling intensity and the likelihood of long-term abstinence from tobacco. Indeed, the data are compelling that pharmacologic and counseling treatment each independently boost cessation success; these data suggest that optimal cessation outcomes may require the combined use of both counseling and pharmacotherapy.

Finally, there is increasing evidence that the success of any tobacco dependence treatment strategy or effort cannot be divorced from the health care system in which it is embedded. Data strongly indicate that effective tobacco interventions require *coordinated interventions*. Just as the clinician must intervene with his or her patient, so must the health care administrator, insurer, and purchaser foster and support tobacco intervention as an integral element of health care delivery. Health care administrators and insurers should ensure that clinicians have the training and support, and receive the reimbursement necessary to achieve consistent, effective intervention with tobacco users.

One important conclusion of this guideline is that the most effective way to move clinicians to intervene is to provide them with information regarding multiple efficacious treatment options and to ensure that they have ample institutional support to use these options. Indeed, in this guideline, the panel encourages a culture of health care in which failure to treat tobacco use—the chief cause of preventable disease and death—constitutes an inappropriate standard of care.

Acknowledgments

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